

property lines across from the abutting residences.

Q. Please explain the analysis of electric and magnetic field issues.

A. The Transmission and Distribution Services Department of National Grid USA Service Company, Inc. prepared a simulation of electric and magnetic field profiles along the right-of-way assuming summer peak conditions for the existing facilities See Exhibit KMH-7, Ward Hill Area Magnetic Field Simulations. The results are as indicated on the table below:

| Location | Magnetic Field Strength (mG) – Summer Peak Loading | |
|---|--|--------|
| | 2004 | 2006 |
| R/W south of the Substation to South Danvers: | | |
| @ north edge of r/w | 13.4 | 21.4 |
| @ south edge of r/w | 67.84 | 68.19 |
| | | |
| R/W west of the Substation to Tewksbury: | | |
| @ northeast edge of r/w | 177.71 | 172.45 |
| @ southwest edge of r/w | 35.79 | 32.03 |

The electric field strengths at the same locations are expected to remain unchanged since the transmission lines will not be modified.

Q. Based upon the evidence you have given and your personal experience and qualifications in the electric utility field and your knowledge of the situation with respect to this particular substation location, is it your opinion that the use of the land as proposed on this proceeding and the substation expansion on such lands are all reasonably necessary and convenient for the public?

A. This is my opinion.

Q. Does this conclude your testimony?